ABSTRACT OF THE DISCLOSURE

A temperature control method is provided which is capable of performing quick, accurate, and error-free soaking control over all wafer areas to be thermally treated at a target temperature without requiring any skilled operator and which can be automated by using a computer. In the temperature control method of controlling a heating apparatus having at least two heating zones in such a manner that temperatures detected at predetermined locations equal a target temperature therefor, temperatures are detected at predetermined locations the number of which is larger than the number of the heating zones, and the heating apparatus is controlled in such a manner that the target temperature falls between a maximum value and a minimum value of a plurality of detected temperatures.